

AD-A219 465

ENVIRONMENTAL ASSESSMENT

GREGORY DIVERSION CHANNEL

MAINTENANCE DREDGING

MISSISSIPPI RIVER POOL 20

LEWIS COUNTY, MISSOURI

OCTOBER 1989



US Army Corps
of Engineers
Rock Island District

DTIC
SELECTED
MAR 15 1990
S P D



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING—P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

1
CENCR-PD-E

ENVIRONMENTAL ASSESSMENT
GREGORY DIVERSION CHANNEL MAINTENANCE DREDGING
MISSISSIPPI RIVER POOL 20
LEWIS COUNTY, MISSOURI

OCTOBER 1989

DTIC
ELECTED
MAR 15 1990
S B D

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

ENVIRONMENTAL ASSESSMENT
 GREGORY DIVERSION CHANNEL MAINTENANCE DREDGING
 MISSISSIPPI RIVER POOL 20
 LEWIS COUNTY, MISSOURI

TABLE OF CONTENTS

<u>Subject</u>	<u>Page</u>
I. Project Purpose and Need for Action	EA-1
II. Project Description	EA-1
III. Alternatives	EA-1
IV. Affected Environment	EA-2
V. Environmental Impacts of the Preferred Alternative	EA-3
VI. Environmental Impacts of Nonpreferred Alternative	EA-6
VII. Probable Adverse Environmental Effects Which Cannot Be Avoided	EA-6
VIII. Relationship Between Short-Term Use and Long-Term Productivity	EA-7
IX. Any Irreversible or Irretrievable Commitments if the Project Is Implemented	EA-7
X. Relationship to Land-Use Plans	EA-7
XI. Compliance with Environmental Quality Statutes	EA-7
XII. Public Involvement and Coordination	EA-9

List of Tables

<u>Title</u>	<u>Page</u>
I Compliance of the Preferred Plan with WRC-Designated Environmental Statutes	EA-8

List of Plates

<u>No.</u>	<u>Title</u>
1	Location Plan
2	Plan and Profile
3	Plan and Profile

ATTACHMENTS:

Finding of No Significant Impact (FONSI)
 Pertinent Correspondence
 Distribution List

EA-i



Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By <i>Perform 50</i>	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
R-1	

ENVIRONMENTAL ASSESSMENT
GREGORY DIVERSION CHANNEL MAINTENANCE DREDGING
MISSISSIPPI RIVER POOL 20
LEWIS COUNTY, MISSOURI

I. PROJECT PURPOSE AND NEED FOR ACTION

A. Project Authority. Gregory Drainage District provides interior drainage for nearly 8,000 acres of agricultural lands and surrounding watershed in Lewis County, Missouri. The runoff, however, is a source of the sediment which necessitates routine maintenance of the drainage channels to maintain proper flow. Maintenance dredging of Gregory ditch will create a uniform drainage system that flows from the District's pump station to the Mississippi River. The proposed project would be funded under the authority of the Rivers and Harbors Act of 1930 which authorizes construction and maintenance of the 9-foot Mississippi River navigation channel.

B. Background Information. In order to comply with the National Environmental Policy Act of 1969, this Environmental Assessment (EA) was prepared to address impacts associated with construction and utilization of new dredged material placement sites along the Mississippi River.

II. PROJECT DESCRIPTION

The Gregory Drainage District has a pumping station located 4.4 miles upstream of Lock and Dam 20 at O'Farrell Lake. The outlet channel for the pump station, Gregory drainage ditch, currently empties into the Mississippi River downstream of Lock and Dam 20. The diversion channel was constructed in 1936 with a pump station installed in 1977 at O'Farrell Lake to increase the efficiency of the drainage system. The channeling effort was made somewhat easier since Hawkin's Slough was an existing natural slough from O'Farrell Lake to the river. This slough became the blueprint for the modified drainage ditch that it is today.

III. ALTERNATIVES

A. Preferred Alternative. The Gregory drainage ditch flows from O'Farrell Lake to its outlet below Lock and Dam 20 near Canton, Missouri (T. 62 N., R. 6 W., sec. 1, 12, 13, 24, 25) (see plate 1). Although the channel has been dredged many times in the past as part of routine maintenance, the work has been done by dragline, with the material being placed on the banks of the channel.

The proposed project involves routine maintenance dredging along the 24,000 feet of Gregory drainage channel from the pump station to the river. Both hydraulic and mechanical means will be used to clean cut the channel. The hydraulically dredged material will be pumped into several agricultural fields along the channel; the mechanically removed material will be side cast along the bank of the ditch.

The first 3,500 feet of channel near Lock and Dam 20 will be dredged mechanically by dragline. Between 13,000-14,000 cubic yards of material will be excavated and side cast onto the adjacent bank. Bulldozers or endloaders will be used to spread the material to grade.

The remainder of the channel will be dredged hydraulically. The channel will be restored to a 30-foot bottom width (26-foot for the mechanical removal portion) with an average depth of 3.7 feet, requiring the removal of approximately 113,000 cubic yards of material. The disposal site locations and configurations are presented in plates 2 and 3. The estimated quantities for each site are presented below:

Site 1	28,167 cubic yards
Site 2	28,174 cubic yards
Site 3	27,407 cubic yards
Site 4	28,522 cubic yards

B. No Action Alternative. The No Action alternative means that Gregory drainage ditch would be left in its present condition. Without dredging, the channel will continue to silt in and eventually become shallow enough for vegetation to grow within it. The efficiency of the pumping station will continue to decrease until the channel is no longer functional as a drainage system.

The No Action alternative is the least desirable of the alternatives and only would be considered if a cost-effective plan could not be developed.

IV. AFFECTED ENVIRONMENT

The project location is in the northeast corner of the state in a rural setting. The channel winds through a mosaic of bottom land forest remnants and intensively farmed agricultural lands. The lower reach is located in the vicinity of the city of Canton, Missouri.

V. ENVIRONMENTAL IMPACTS OF THE PREFERRED ALTERNATIVE

A. Air and Noise Quality. The project is principally located in a rural area where an increase in travel to the placement site will have a minimal effect on existing air and noise levels. Minor impacts to the air quality within the project vicinity are common during such construction projects. However, this area is uninhabited, so the temporary increase in exhaust fumes from heavy equipment operating in the area will not affect human populations. Since the construction and dredging phases are short-term in duration, there will be no permanent impacts to the environment or local wildlife populations.

The completed project would have no impact on noise levels in the project vicinity. Low-level noise would be emitted from the dredge during daylight hours for several weeks, with additional noise generated by heavy machinery during the construction of the containment areas in the agricultural fields.

B. Aquatic Community. Although dredging of the existing channel will have a temporary effect on water quality, completion of the overall project should benefit the aquatic community as a whole. Resident benthic and mussel communities will be disrupted by the dredging operations. However, benthic organisms are quick to recover from such disturbances and will soon repopulate the channel. Mussels and fish populations will benefit from the channel cleanout, since the end result will improve flow conditions through the channel.

C. Terrestrial Habitat and Wildlife. In addition to the common bottom land forest community of cottonwood and silver maple tree species, Kentucky coffee tree, Ohio buckeye, and northern pecan species are common along the project boundaries. Nettles, poison ivy, and trumpet creeper are common species found in the understory growth. Terrestrial wildlife is typical of that found elsewhere in the Mississippi River bottom land forests. Common large mammals are white-tailed deer, raccoon, opossum, skunk, gray squirrel, and others. Wild turkey and pheasant are two game birds common in the area, along with numerous species of songbirds associated with bottom land forests. Waterfowl, primarily ducks and geese, use the channel for nesting and during the migratory stopover and wintering seasons.

The effect to these species will be a disruption of daily activities during the construction phase of the project. Other wildlife, such as muskrat, beaver, and the numerous songbird species, which may move through and around the project area, should only be affected to the extent of travel disruption. Overall impacts to the surrounding wilalife populations would be minimal and temporary.

D. Endangered Species. Correspondence with the U.S. Fish and Wildlife Service and the Missouri Department of Conservation under the Fish and Wildlife Coordination Act determined that the project would have no effect on threatened or endangered species or sensitive communities (see attached

Pertinent Correspondence). This coordination fulfills the compliance requirement of the Endangered Species Act (16 U.S.C. 1531, et seq.).

E. Water Quality. One of the major impacts to water quality will be the temporary increase in turbidity and suspended solids levels created during the dredging operation. Some material will be carried out to the river during this flushing of the channel. However, the system will soon reach an equilibrium between the river and channel, and the overall impact is minimal and temporary. Section 401 Water Quality Certification has been applied for from the State of Missouri by letter dated June 6, 1989.

F. Water Conservation. Not applicable to this study area.

G. Manmade Resources. The Gregory drainage ditch is a manmade system that is designed to channel water out of the agricultural fields within the district. Although originally a natural slough, the channel has been modified by dredging and the installation of a pumping station. It now serves as a manmade drainage system to carry water from O'Farrell Lake over to the Mississippi River. Impacts to the drainage district will be positive and beneficial upon completion of the project, since the pumping station will operate more efficiently.

H. Aesthetic Values. The appearance of the area will not be significantly affected. The preferred disposal areas would not suffer any adverse impacts from placement of dredged material, as the material would be placed on cultivated ground.

I. Cultural Resources. On 5 days between March and June 1989, a Corps of Engineers archeologist performed an intensive survey on the four areas to be used for the placement of dredged material. The archeological survey included archival background research. This investigation was conducted to determine if the four dredged material placement areas contained historic properties eligible to be listed, or listed on, the National Register of Historic Places.

As a result of the investigations, two sites were documented with the Archaeological Survey of Missouri as prehistoric habitation sites 23LE311 and 23LE312. The configurations of the dredged easement areas were designed to avoid these historic properties and to result in a No Effect determination. The report entitled Cultural Resource Investigations Phase I Archeological Survey for the Proposed Gregory Diversion Ditch Dredge Material Placement Easements, Lewis County, Missouri describes the Section 106 compliance carried out in accordance with the National Historic Preservation Act of 1966 (as amended in 1980) and Missouri's Guidelines for Contract Cultural Resource Survey Reports and Professional Qualifications distributed by the Missouri State Historic Preservation Office (SHPO).

The report was presented to the SHPO for review. On August 24, 1989, the SHPO concurred with the Corps of Engineers' No Effect determination for the proposed undertaking, based upon the stipulation that:

... if the currently defined project area or scope of project related activities is changed or revised, or cultural materials are encountered during construction, the Missouri Historic Preservation Program must be notified and appropriate information relevant to such changes, revisions, or discoveries be provided for further review and comment, in order to ascertain the need for additional investigations.

The SHPO concurrence letter is located in the Pertinent Correspondence as documentation of Natural Historic Preservation Act compliance.

J. Community Cohesion. The rural nature of the project and the limited residential and other development in the area indicates that there will be no adverse impacts to community cohesion by implementing this project. Owners of the proposed placement site lands would not be expected to oppose the necessary easements.

K. Community or Regional Growth. No significant effects to community or regional growth would result from the proposed channel maintenance.

L. Displacement of People. No residential relocations would be necessitated by the project.

M. Employment and Labor Resources. The maintenance dredging would have limited short-term impacts on employment in the project vicinity. No permanent effect on area employment would result.

N. Displacement of Farms. Approximately 113,000 cubic yards of material is scheduled to be removed hydraulically. Therefore, about 40 acres of cropland would be removed from production for two growing seasons while the dredged material is placed in the containment sites. After the material has dried out, the berms will be leveled and the containment sites graded so that the land can be returned to production. The increased elevation might improve drainage and possibly improve yields.

A Farmland Conversion Impact Rating was completed in conjunction with the USDA Soil Conservation Service to fulfill compliance with the Farmland Protection Policy Act (see attached Pertinent Correspondence). Evaluation of the placement sites determined that the land is considered prime and unique farmland, but the total acreage affected only represents 0.1 percent of the total farmland in the county. Furthermore, the containment sites serve a temporary function, with the land ultimately being returned to producing crops.

O. Property Values and Tax Revenues. The preferred disposal site would be filled to a depth between 1.5 and 2 feet. Following the disposal of the dredged material, the affected agricultural land could be less prone to drainage problems. Consequently, a slight increase in the value of this parcel of land could occur.

Although tax revenues could be affected by a change in the area property values, no significant impact to area tax revenues would be expected by implementing this project.

P. Public Facilities and Services. The proposed project would positively impact public facilities and services. The drainage district would benefit from increased pumping station efficiency and reduced expenditures.

Dredging would improve recreational fishing in the channel due to increased depth and flow from the pump station to the river.

Q. Life, Health and Safety. The existing channel poses no threat to the life, health, or safety of landowners, recreationists, or others in the vicinity.

R. Business and Industrial Development. A slight increase in business and industrial activity would be noticed during project construction. However, no long-term effects on business or industrial activity would result. The project would not require any business or industrial relocations.

VI. ENVIRONMENTAL IMPACTS OF NONPREFERRED ALTERNATIVE

The environmental impacts of the No Action alternative are minimal. Gradual sedimentation of the channel will only affect the usefulness of the channel as a drainage ditch. If left unmaintained, the channel would eventually become established as an emergent wetland.

VII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Disruption of the aquatic community during the dredging operation will have minor adverse impacts which cannot be avoided. However, completion of the project will ultimately benefit the aquatic community. Recommendations from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service to overdredge numerous segments of the channel to create deep water areas as refuges for fish will be incorporated into the project. The maintenance dredging in conjunction with overdredging aforementioned will offset any impacts to the aquatic community caused by the project, and, in the long run, will improve the habitat for resident fish populations.

The agencies also recommended replanting the bankline with mast trees to revegetate the existing bankline. However, this recommendation is not feasible since the channel maintenance in the future may require the use of a dragline. The dragline will need the working distance available at present to manipulate the boom of the dragline. On the other hand, the

Corps recommends that the area be reseeded with a native grass mixture to establish grassland habitat along the channel.

VIII. RELATIONSHIP BETWEEN SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

The long-term productivity of Gregory drainage network is jeopardized by the continued sedimentation of the channel. Periodic maintenance is necessary to keep the system operational. The fields used for placement of the dredged material will be out of production temporarily but may benefit by an increase in productivity due to the addition of silty material that is high in nutrients.

IX. ANY IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS IF THE PROJECT IS IMPLEMENTED

Fuel consumed, manpower expended, and the commitment of construction materials are considered irretrievable.

X. RELATIONSHIP TO LAND-USE PLANS

Much of the land adjacent the project boundaries has been logged and cleared for crop production. The land use of the affected area will probably remain as follows. The disposal sites will be bermed to completely contain the dredged material. The agricultural field will return to production after the material has dried and can be tilled again. Several small wetland complexes lie adjacent to the proposed disposal sites but will not be affected by the dredging operations.

The bankline will revegetate both naturally and by post-dredging seeding as soon as the project is completed. A functional drainage system will be restored which is necessary since it is the most efficient way to move water from the pumping plant to the river.

XI. COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES

Compliance with WRC-Designated Environmental Statutes that have not been specifically addressed earlier in this report are covered in table EA-1.

TABLE EA-1

Compliance of the Preferred Plan with
WRC-Designated Environmental Statutes

<u>Federal Policies</u>	<u>Compliance</u>
Archaeological and Historic Preservation Act, 16 U.S.C. 469, et seq.	Full compliance
Clean Air Act, as amended, 42 U.S.C. 165h-7, et seq.	Full compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not applicable
Endangered Species Act, 16 U.S.C. 1531, et seq.	Full compliance
Federal Water Project Recreation Act, 16 U.S.C. 460-1 (12), et seq.	Full compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.	Full compliance
Land and Water Conservation Fund Act, 16 U.S.C. 4601, et seq.	Not applicable
Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not applicable
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full compliance
National Historic Preservation Act, 16 U.S.C. 470a, et seq.	Full compliance
Rivers and Harbors Act, 33 U.S.C. 401, et seq.	Full compliance
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Full compliance
Wild and Scenic Rivers Act, 16 U.S.C. 1271, et seq.	Not applicable
Farmland Protection Policy Act, 7 U.S.C. 4202, et seq.	Full compliance

XII. PUBLIC INVOLVEMENT AND COORDINATION

Coordination with the public and governmental agencies has been maintained during the planning process. Under the Fish and Wildlife Coordination Act, the Missouri Department of Conservation, the U.S. Environmental Protection Agency, and the U.S. Fish and Wildlife Service were contacted by letter (see attached Pertinent Correspondence). The agencies agree with the evaluation that the net effect of the proposed action would not be significant. Individual agency concerns have been addressed earlier in this report.

Additional coordination for this EA is accomplished by circulating it for review and comment by various individuals and local, State, and Federal agencies as shown on the distribution list.

FINDING OF NO SIGNIFICANT IMPACT

GREGORY DIVERSION CHANNEL MAINTENANCE DREDGING MISSISSIPPI RIVER POOL 20 LEWIS COUNTY, MISSOURI

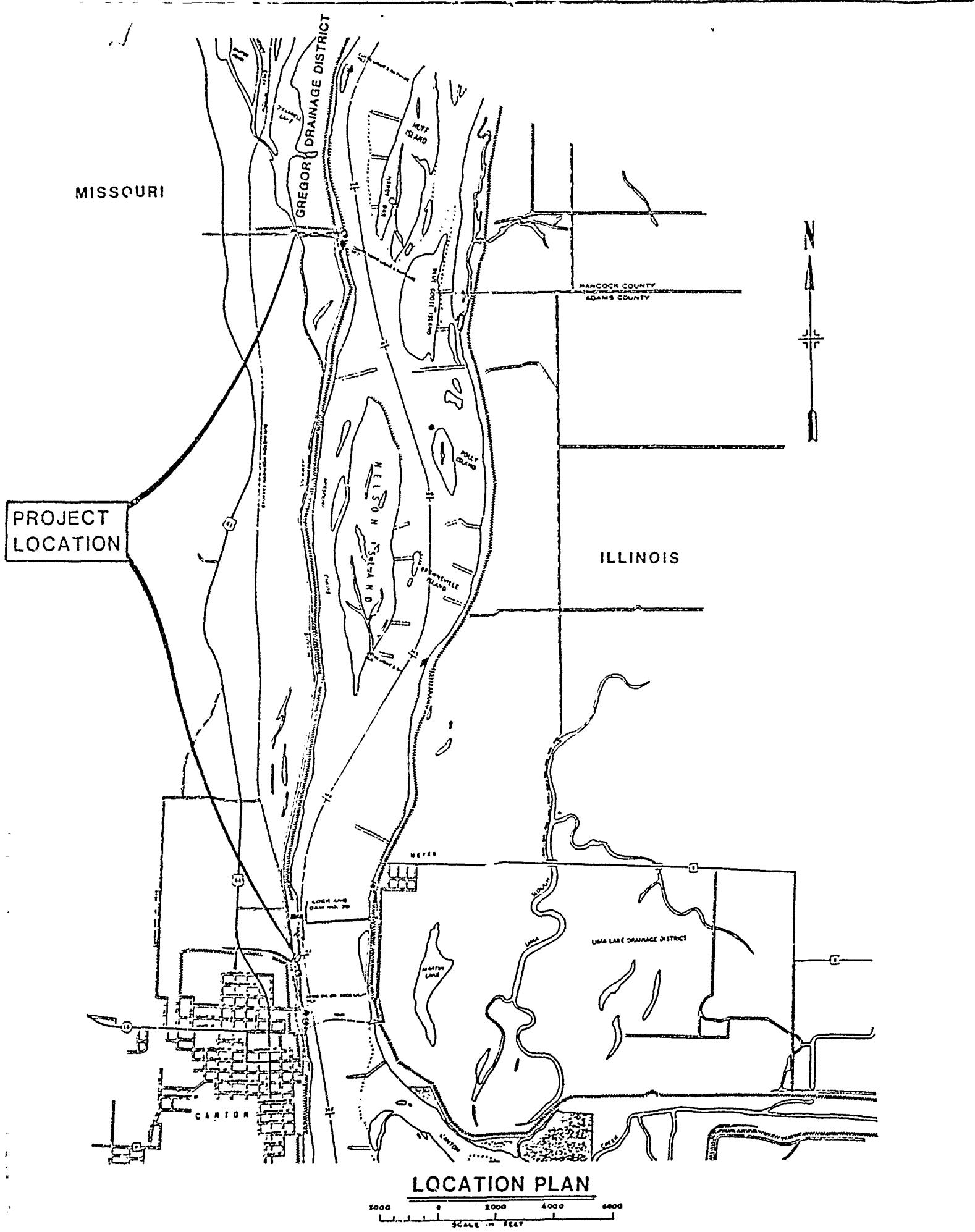
Having reviewed the information contained in this Environmental Assessment, I find that the maintenance dredging of the Gregory diversion channel will have no significant adverse effects on the environment. This project is not a major Federal action and therefore preparation of an Environmental Impact Statement (EIS) is not required. This determination may be reevaluated if warranted by later developments.

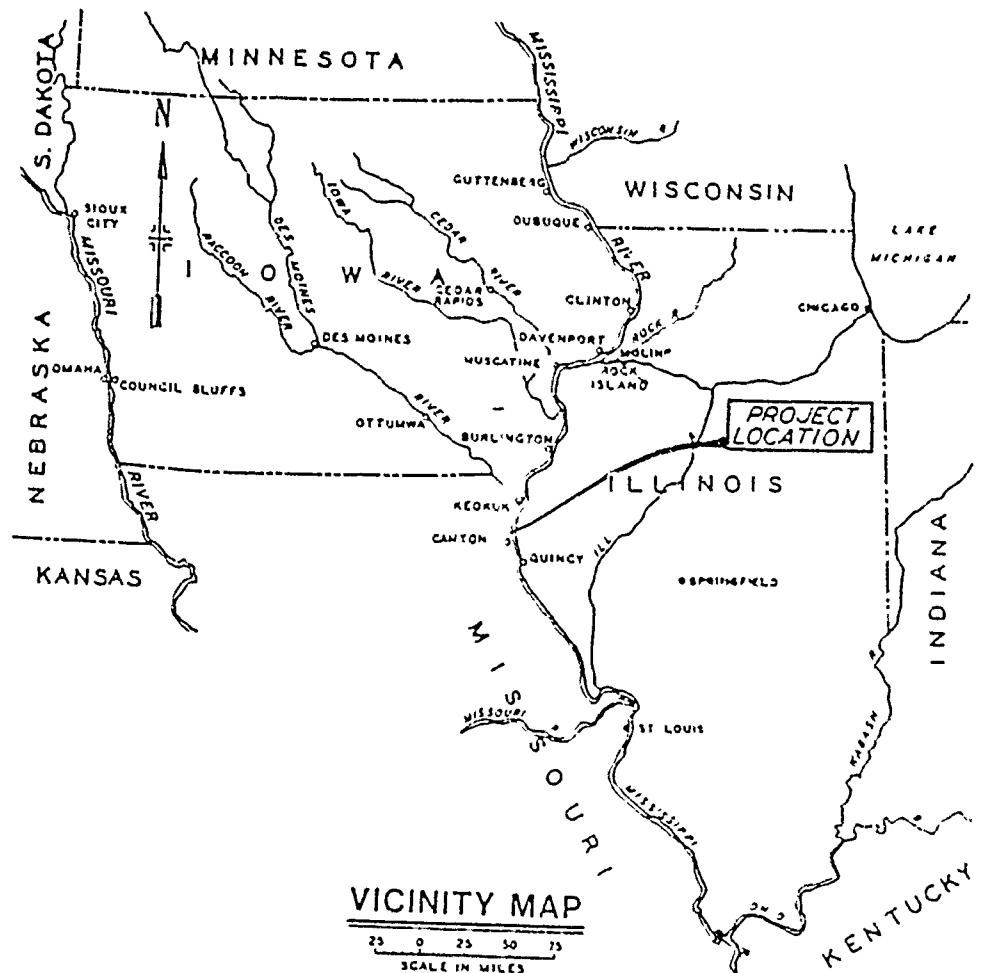
Factors that were considered in making this determination that an EIS was not required are:

- a. The project involves maintenance dredging of an existing drainage system to improve the flow of water to the river.
- b. Impacts to local wildlife and aquatic communities will be minimal and temporary. Minor impacts will be offset by over dredging several reaches of the channel to improve fisheries habitat. The banks of the channel will be reseeded with native grasses for wildlife habitat
- c. No significant environmental, social, economic, or cultural impacts are anticipated as a result of implementing the proposed project.

Date

John R. Brown
Colonel, U.S. Army
District Engineer





SIGNATURES AFFIXED BELOW INDICATE
OFFICIAL RECOMMENDATION AND
APPROVAL OF ALL DRAWINGS IN THIS
SET AS INDICATED ON EACH INDIVIDUAL
TITLE BLOCK

Prepared by
U.S. ARMY ENGINEER DISTRICT, ROCK ISLAND
Submitted by
CHIEF, DESIGN BN

CHIEF, HYDRAULICS BN

CHIEF, GEOTECHNICAL BN
Recommended by

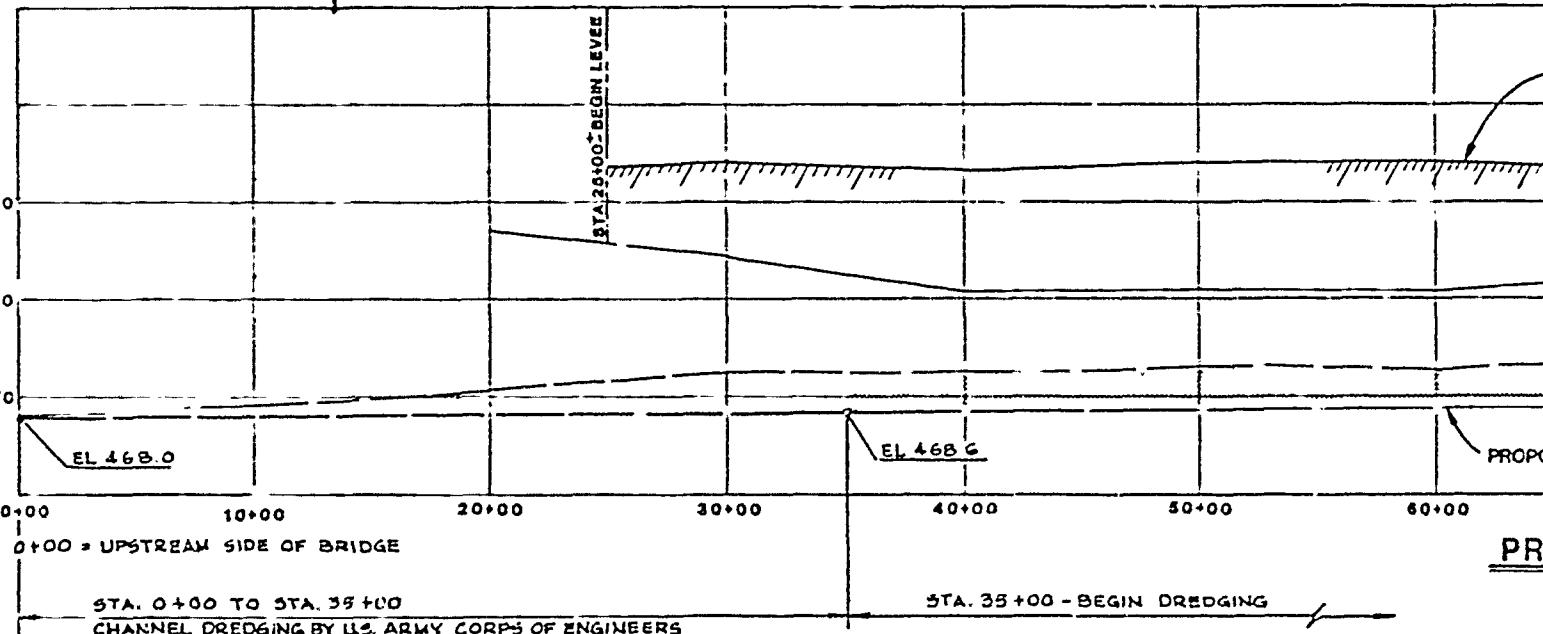
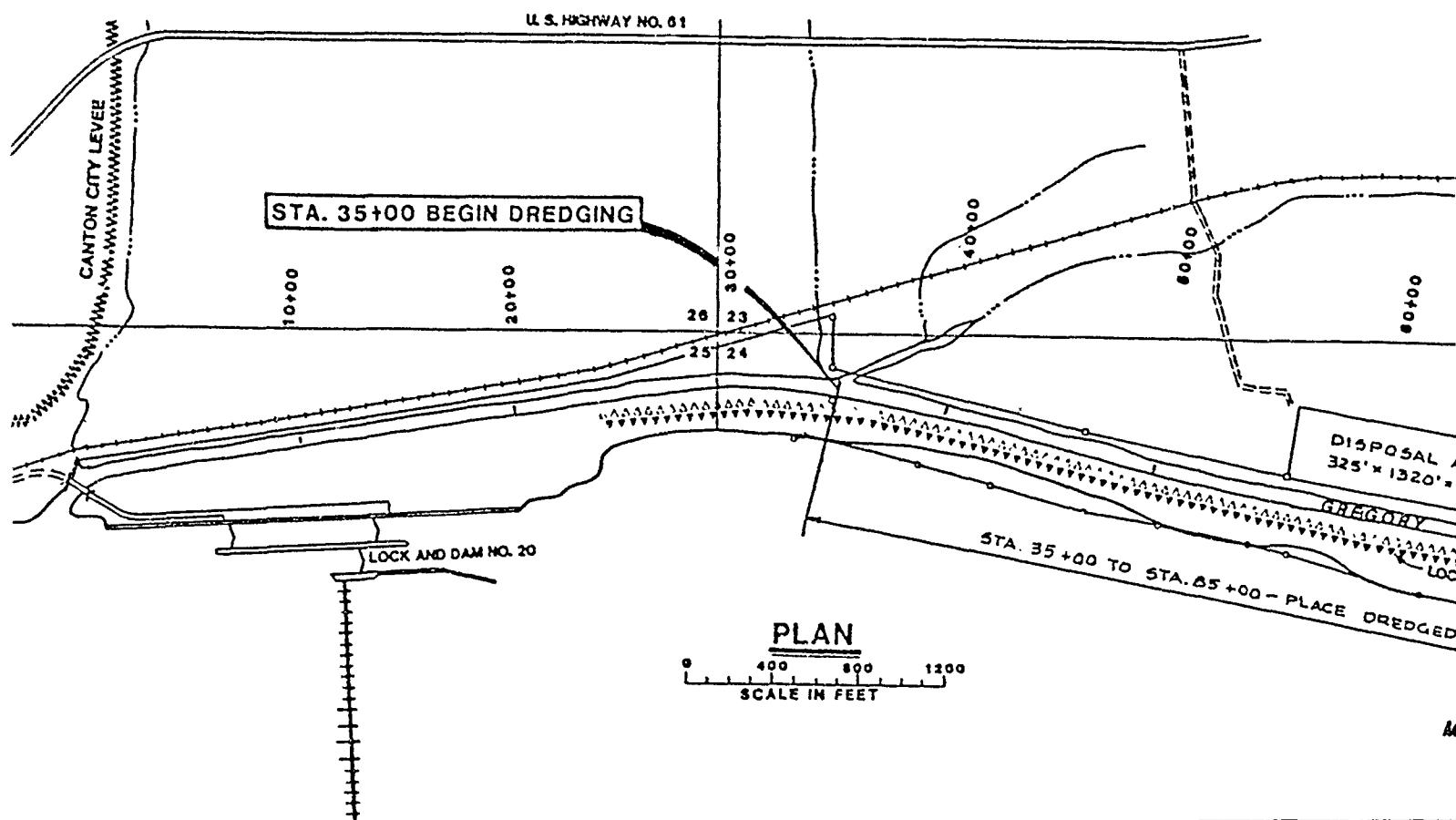
CHIEF ENGINEERING DIV.
Approved by

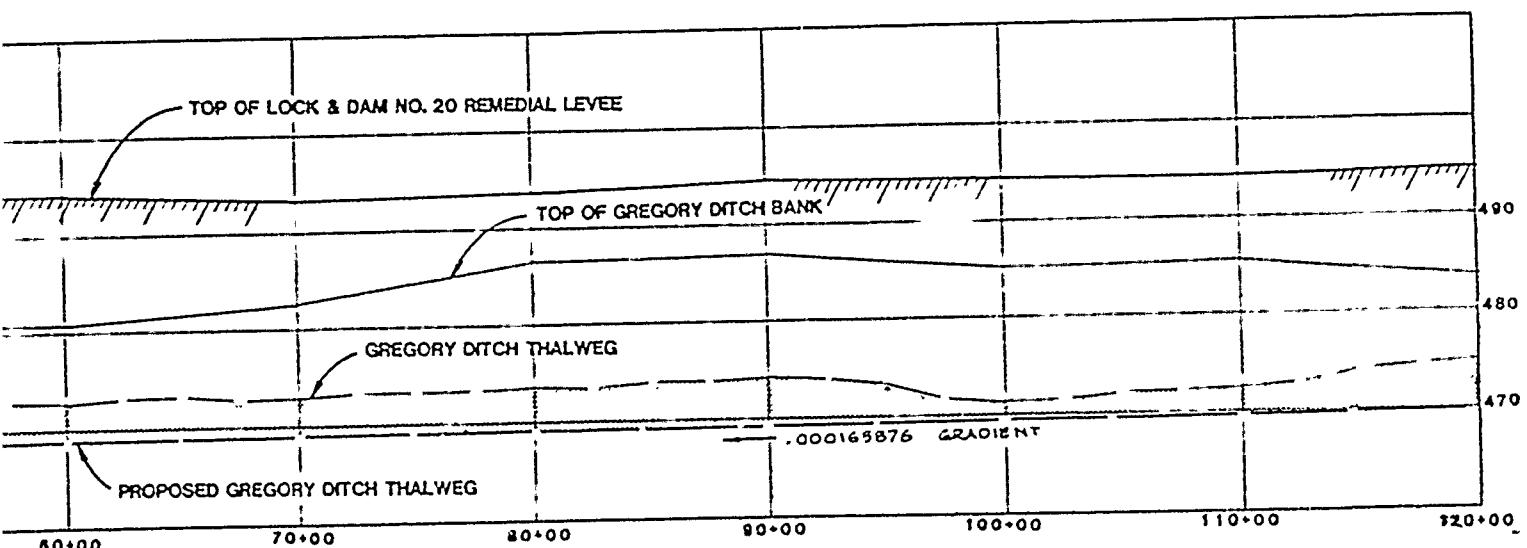
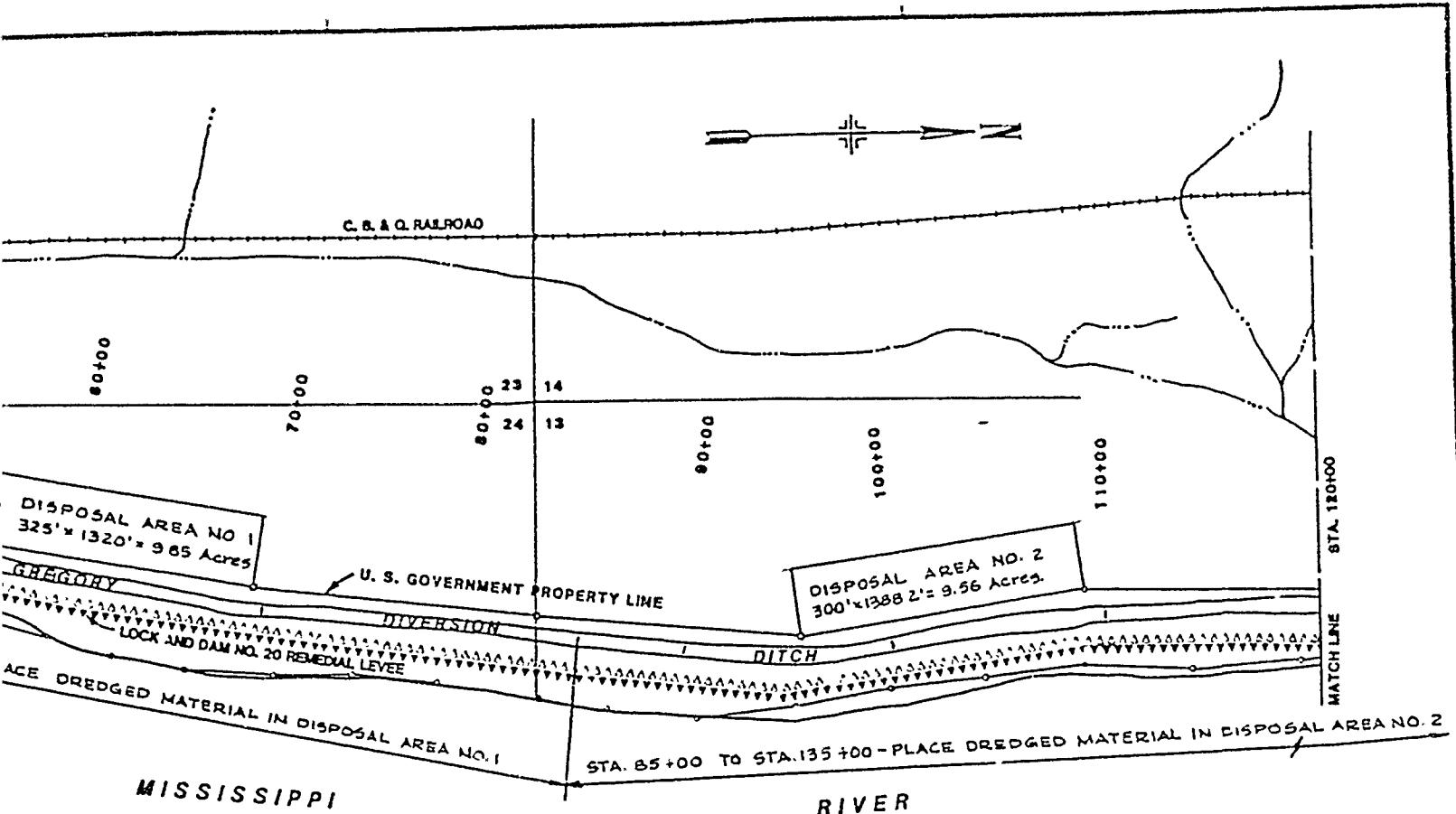
COL. COMMANDER OF ENGINEERS DATE

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

**MISSISSIPPI RIVER
LGCK AND DAM NO. 20
GREGORY DIVERSION DITCH
CHANNEL DREDGING
LOCATION PLAN AND INDEX**

Plate 1.





PROFILE

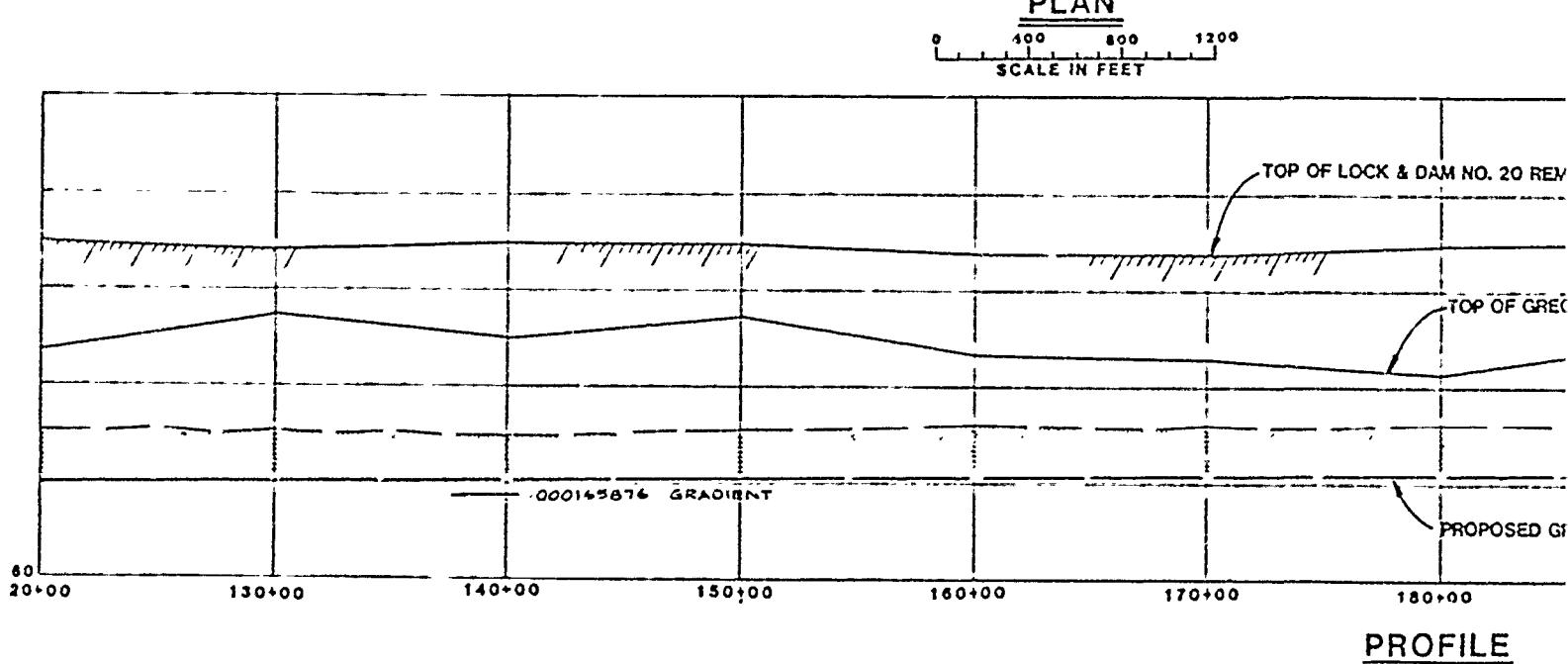
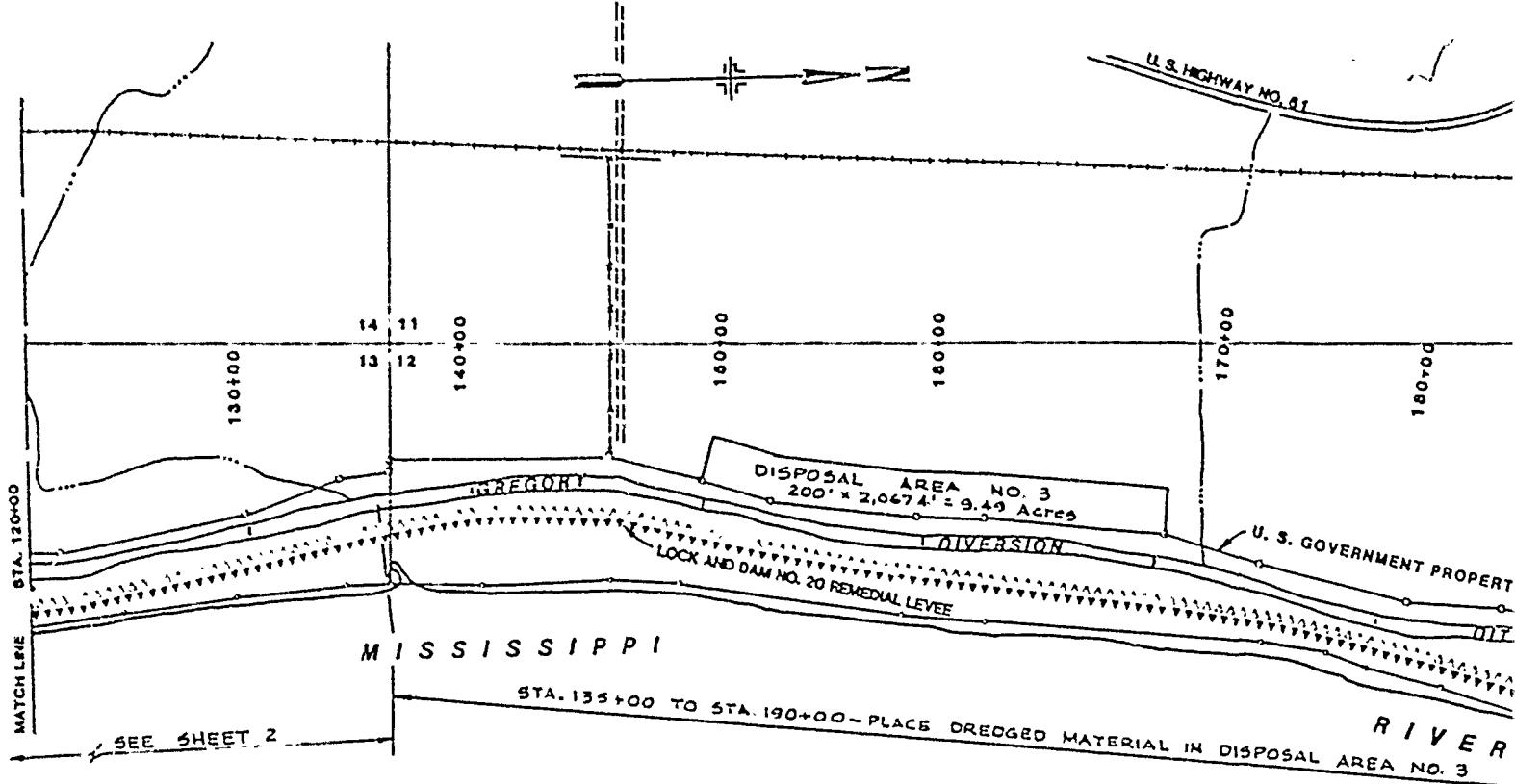
NOTES

1. DISPOSAL AREAS, INCLUDING THE DIKES AND WEIRS WILL BE CONSTRUCTED AND MAINTAINED BY THE U.S. ARMY CORPS OF ENGINEERS.
2. THE DREDGE CUT SHALL HAVE A TOP WIDTH OF 30', IT IS ANTICIPATED THAT THE SIDE SLOPES MAY SLOUGH.

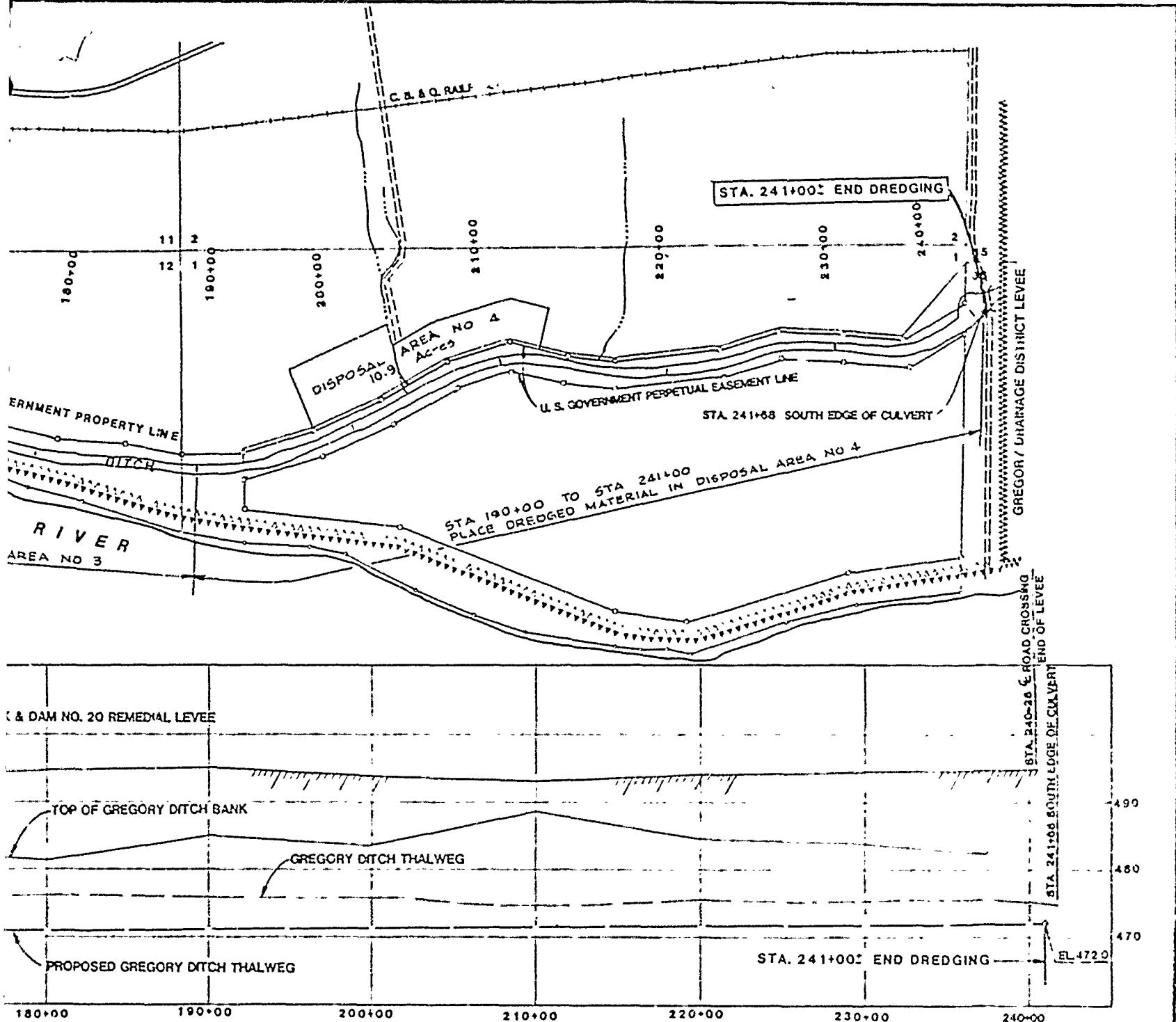
U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ROCK ISLAND, ILLINOIS

MISSISSIPPI RIVER
LOCK AND DAM NO. 20
GREGORY DIVERSION DITCH
CHANNEL DREDGING
PLAN AND PROFILE

Plate 2.



PROFILE



PROFILE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

March 28, 1989

Colonel Neil A. Smart, USA
U.S. Army Engineer District, Rock Island
ATTN: Planning Division
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 61204-2004

Dear Colonel Smart:

RE: Maintenance Dredging of Gregory Chute, Lewis County,
Missouri

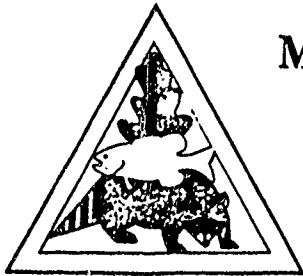
In response to your request, we have reviewed the information provided to us on the project referenced above. We have no objections to the project at this time, but reserve the right to comment otherwise upon review of the Environmental Assessment.

Thank you for the opportunity to comment.

Sincerely yours,

Lawrence M. Cavin

Lawrence M. Cavin
Chief, Environmental Review
and Coordination



MISSOURI DEPARTMENT OF CONSERVATION

MAILING ADDRESS:
P.O. Box 180
Jefferson City, Missouri 65102-0180

STREET LOCATION:
2901 West Truman Boulevard
Jefferson City, Missouri

Telephone: 314/751-4115
JERRY J. PRESLEY, Director

April 25, 1989

Mr. Dudley M. Hanson
Chief, Planning Division
Rock Island District, Corps of Engineers
P. O. Box 2004
Rock Island, Illinois 61204

Re: Gregory Diversion Ditch

Dear Mr. Hanson:

In response to your March 13, 1989 letter, members of the Department staff made an onsite inspection of the area involved in the proposed cleanout of Gregory Diversion Ditch, Lewis County, Missouri. The following comments are based on that letter and plans provided:

1. There was some difficulty in locating the disposal sites in the field. It appears that Disposal Site #4 would be located in a wooded area, while your letter indicated disposal sites would be in agricultural areas.
2. We were surprised to see that a majority of the U. S. Government owned land along the ditch was essentially devoid of vegetation. There would appear to be an opportunity to restore riparian wetland vegetation along a major part of the ditch. We would recommend the government owned lands be planted with woody wetland vegetation such as pin oak. Since the maintenance will be hydraulic dredging, the need for a cleared right-of-way on both sides of the ditch is not apparent.
3. To restore some aquatic habitat, we urge you to consider over-dredging the ditch at 200 ft. to 250 ft. intervals. Overdredging to a depth of 10 feet would assure winter survival of fishes in the ditch.
4. During the field tour, staff noted that fill material had recently been placed along the west ditch bank in the vicinity of the bridge to Lock and Dam 20. We do not recall commenting on a Section 404 for the placement of this fill material. Was the material placed by Corps of Engineers or other interests?

COMMISSION

JEFF CHURAN
Chillicothe

JAY HENGES
Earth City

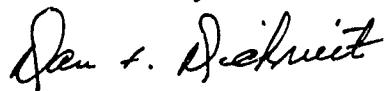
JOHN POWELL
Rolla

RICHARD REED
East Prairie

Mr. Dudley M. Hanson
April 25, 1989
Page Two

I hope these thoughts will be of value as you further refine your plans. We would hope to have an opportunity to further interact with your staff or review plans placed on current aerial photographs. If there are questions, please contact William H. Dieffenbach at the above address.

Sincerely,



DAN F. DICKNEITE
ENVIRONMENTAL ADMINISTRATOR

cc: U. S. Fish and Wildlife Service
Rock Island, Illinois



United States Department of the Interior

FISH AND WILDLIFE SERVICE.

IN REPLY REFER TO:

ROCK ISLAND FIELD OFFICE (ES)
1830 Second Avenue, Second Floor
Rock Island, Illinois 61201

COM: 309/793-5800
FTS: 386-5800

May 22, 1989

Colonel Neil A. Smart
District Engineer
U.S. Army Engineer District
Rock Island
Clock Tower Building, P.O. Box 2004
Rock Island, Illinois 61204-2004

Dear Colonel Smart:

This refers to your letter of March 13, 1989 requesting our comments on the maintenance dredging project for the Gregory Drainage Ditch, Lewis County, Missouri. We have reviewed the project information and the comments provided by the Missouri Department of Conservation. We concur with their comments and recommend that riparian vegetation be restored along the drainage ditch and overdredging be conducted at 200-250 feet intervals to a depth of 10 feet.

Endangered Species

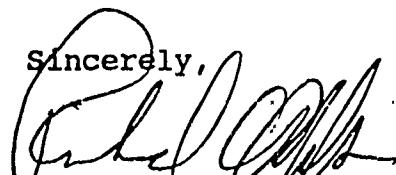
To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, Federal Agencies are required to obtain from the Fish and Wildlife Service information concerning any species, listed or proposed to be listed, which may be present in the area of a proposed action. Therefore, we are furnishing you the following list of species which may be present in the concerned area:

<u>Classification</u>	<u>Common Name</u>	<u>Scientific Name</u>	<u>Habitat</u>
Endangered	Indiana Bat	<u>Myotis sodalis</u>	Caves and Riparian Habitat
Endangered	Bald Eagle	<u>Haliaeetus leucocephalus</u>	Breeding Wintering

Since no riparian vegetation is proposed to be removed, the project will not affect the endangered species.

This precludes the need for further action on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. Should this project be modified or new information indicate endangered species may be affected, consultation should be initiated.

Sincerely,



Richard E. Nelson
Field Supervisor

cc: MDOC (Dieffenbach)

JM:hw



United States
Department of
Agriculture

Soil
Conservation
Service

555 Vandiver Drive
Columbia, Missouri
65202

August 24, 1989

RE:

Lewis County, Missouri
Gregory Drainage Ditch Maintenance Dredging
Temporary Containment Area for Dredging
Farmland Conversion Impact Rating

Department of the Army
U.S. Army Engineer District, Rock Island
Clock Tower Building, P.O. Box 2004
Rock Island, Illinois 61204-2004

The farmland conversion impact rating for the site
referenced above is attached.

Sincerely,

Richard L. Tummons

Bruce W. Thompson
State Soil Scientist

Attachment



The Soil Conservation Service
is an agency of the
Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 8-7-89
Name Of Project Gregory Drainage Ditch Maintenance	Federal Agency Involved Corps of Engineers	
Proposed Land Use Dredging	County And State Lewis, Missouri	
PART II (To be completed by SCS)		Date Request Received By SCS 8-10-89
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
		Acres Irrigated NONE
Major Crop(s) CORN - SOYBEANS		Acreable Land In Govt. Jurisdiction Acres: 322.800 %
Name Of Land Evaluation System Used LEWIS CO LESA		Name Of Local Site Assessment System —
PART III (To be completed by Federal Agency)		Alternative Site Rating
10 Acres Each		Site A Site B Site C Site D
A. Total Acres To Be Converted Directly 4 separate sites		40
B. Total Acres To Be Converted Indirectly		160
C. Total Acres In Site		200
PART IV (To be completed by SCS) Land Evaluation Information		
A. Total Acres Prime And Unique Farmland		200
B. Total Acres Statewide And Local Important Farmland		0
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.1056%
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		12.4
PART V (To be completed by SCS) Land Evaluation Criterion		
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		93
PART VI (To be completed by Federal Agency)		Maximum Points
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))		
1. Area In Nonurban Use		15
2. Perimeter In Nonurban Use		10
3. Percent Of Site Being Farmed		20
4. Protection Provided By State And Local Government		0
5. Distance From Urban Builtup Area		10
6. Distance To Urban Support Services		10
7. Size Of Present Farm Unit Compared To Average		5
8. Creation Of Nonfarmable Farmland		5
9. Availability Of Farm Support Services		5
10. On-Farm Investments		10
11. Effects Of Conversion On Farm Support Services		0
12. Compatibility With Existing Agricultural Use		0
TOTAL SITE ASSESSMENT POINTS		90
PART VII (To be completed by Federal Agency)		
Relative Value Of Farmland (From Part V)		93
Total Site Assessment (From Part VI above or a local site assessment)		90
TOTAL POINTS (Total of above 2 lines)		183
Site Selected: (A)	Date Of Selection 8/30/89	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Reason For Selection		

THE 4 SITES WILL BE USED AS TEMPORARY CONTAINMENT SITES FOR DREDGED MATERIAL.

JOHN ASHCROFT
Governor

G. TRACY MEHAN III
Director



Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation,
and Historic Preservation

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS, RECREATION, AND HISTORIC PRESERVATION
P.O. Box 176
Jefferson City, MO 65102
314-751-2479

August 24, 1989

Mr. Dudley M. Hanson
Chief, Planning Division
Department of the Army
Rock Island District, COE
P.O. Box 2004
Rock Island, Illinois 61204-2004

**RE: Proposed Dredge Material Placement Areas (COE), Canton Vicinity, Lewis
County, Missouri**

Dear Mr. Hanson:

In response to your letter dated 02 August 1989 concerning the above referenced project, the Historic Preservation Program has reviewed the information provided and has determined that no property listed on or determined eligible for inclusion in the National Register of Historic Places will be affected by the proposed undertaking. Therefore, we have no objections to the initiation of project activities.

However, if the currently defined project area or scope of project related activities is changed or revised, or cultural materials are encountered during construction, the Missouri Historic Preservation Program must be notified and appropriate information relevant to such changes, revisions, or discoveries be provided for further review and comment, in order to ascertain the need for additional investigations.

If I can be of further assistance, please write or call 314/751-7860.

Sincerely,

HISTORIC PRESERVATION PROGRAM

A handwritten signature in black ink, appearing to read "MSW".
Michael S. Weichman
Senior Archaeologist

MSW:nc

cc: Ron Deiss

DISTRIBUTION LIST FOR
ENVIRONMENTAL ASSESSMENT
GREGORY DIVERSION CHANNEL
MAINTENANCE DREDGING
MISSISSIPPI RIVER POOL 20
LEWIS COUNTY, MISSOURI
DISTRIBUTION -- EXTERNAL

NO
COPIES*

HONORABLE CHRISTOPHER BOND, UNITED STATES SENATOR
815 OLIVE ST. ROOM 224, ST LOUIS MO 63101

HONORABLE JOHN C. DANFORTH, UNITED STATES SENATOR
815 OLIVE STREET, ST LOUIS MO 63103

HONORABLE HAROLD L VOLKMER, REPRESENTATIVE IN CONGRESS
FEDERAL BUILDING-ROOM 370, 801 BROADWAY
HANNIBAL MO 63401-4353-4353

DIRECTOR, ADVISORY COUNCIL ON HISTORIC PRESERV
OLD PO BLDG #809, 1100 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004

DIRECTOR, US DEPT OF COMMERCE
OFFICE OF ENVIRONMENTAL AFFAIRS, ROOM 3425
WASHINGTON DC 20235

OFFICE OF ENVIRONMENTAL PROJ REVIEW, DEPARTMENT OF INTERIOR
MS 4239-MIB, 18TH & C STREETS NW - ROOM 4241
WASHINGTON DC 20240

18

DR DAVID CLAPP, OFFICE OF THE DIRECTOR
CNTR FOR ENV HEALTH&INJ CONTROL/F 2, CENTERS FOR DISEASE CONTROL
ATLANTA GA 30333

MR VALDAS J ADAMKUS - ADMINISTRATOR, US ENVIRONMENTAL PROTECTION AGCY 3
230 S DEARBORN ST, CHICAGO IL 60604

REGIONAL ENGINEER, FERC REGIONAL OFFICE
FEDERAL BLDG - 31ST FLOOR, 230 S DEARBORN ST
CHICAGO IL 60604

MR RICHARD NELSON - FIELD SUPRVR, U.S.FISH & WILDLIFE SERVICE
1830 SECOND AVE. - 2ND FLOOR, ROCK ISLAND, IL 61201

MR MORRIS KAY, ADMINISTRATOR
US ENVIRON PROT AGENCY-REG VII, 726 MINNESOTA AVE
KANSAS CITY KS 66101

3

DISTRIBUTION -- EXTERNAL

NO
COPIES*

MR JAMES C GRITMAN-REGIONAL DIRECTOR, U.S.FISH AND WILDLIFE SERVICE
FEDERAL BLDG FORT SNELLING, TWIN CITIES MN 55111

DIRECTOR, FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VII, 911 WALNUT STREET - ROOM 300
KANSAS CITY MO 64106

REGIONAL ADMINISTRATOR, FEDERAL HIGHWAY ADMN - REG 7
PO BOX 19715, KANSAS CITY MO 64141

STATE DIRECTOR, FARMERS HOME ADMIN - USDA
PARKDALE PLAZA, 555 VANDIVER DR - TERRACE LEVEL
COLUMBIA MO 65201

REGIONAL DIRECTOR, REGION VIII
FEDERAL RAILROAD ADMINISTRATION, 2903 FEDERAL OFFICE BLDG
KANSAS CITY MO 64106

LEE W LARSON - W/CR2, NWS CENTRAL REGION HYDR
601 E 12TH STREET - ROOM 1836, KANSAS CITY MO 64106

STATE CONSERVATIONIST, SOIL CONSERVATION SERVICE
555 VANDIVER DRIVE, COLUMBIA MO 65201

2

COMMANDER, DEPARTMENT OF TRANSPORTATION
SECOND COAST GUARD DISTRICT, 1430 OLIVE STREET
ST LOUIS MO 63101

DISTRICT CHIEF - WRD, GEOLOGICAL SURVEY
1400 INDEPENDENCE RD - MS 200, ROLLA MO 65401

REGIONAL FORESTER, FOREST SERVICE
US DEPT OF AGRICULTURE, 310 W WISCONSIN AVE-SUITE 500
MILWAUKEE WI 53203

2

HONORABLE JOHN ASHCROFT, GOVERNOR OF MISSOURI
STATE CAPITOL, JEFFERSON CITY MO 65101

LOIS POHL - COORDINATOR, MO FED ASSISTANCE CLEARINGHOUSE
TRUMAN BUILDING - ROOM 760, PO BOX 809
JEFFERSON CITY MO 65102

*SINGLE COPIES DISTRIBUTED EXCEPT AS INDICATED

DISTRIBUTION -- EXTERNAL

NO
COPIES*

DIRECTOR, DIV OF COMMERCE & INDUSTRIAL DVLP
PO BOX 118, 100 E CAPITOL
JEFFERSON CITY MO 65101

CHARLES R MICHAEL-DIRECTOR, RIVER BASIN PLNG/POLICY UNIT
DEPT OF NATURAL RESOURCES, PO BOX 176
JEFFERSON CITY MO 65102

DIRECTOR, MISSOURI NATURAL RESOURCES COUNCIL
PO BOX 176, JEFFERSON CITY MO 65101

DIRECTOR, MISSOURI DEPT OF AGRICULTURE
JEFFERSON BUILDING, JEFFERSON CITY MO 65102

MR GORDON FARABEE, MISSOURI DEPT OF CONSERVATION
RR 1 BOX 55, PALMYRA MO 63461

MR WILLIAM DEIFFENBACH, MISSOURI DEPT OF CONSERVATION
PO BOX 180, JEFFERSON CITY MO 65101

MR JERRY J PRESLEY - DIRECTOR, DEPARTMENT OF CONSERVATION
PO BOX 180, JEFFERSON CITY MO 65102

MR ROBERT DOBBINS, MISSOURI DEPT OF CONSERVATION
RR 1 BOX 198, ELSBERRY MO 63343

ROBERT HUNTER - CHIEF ENGINEER, MISSOURI STATE HIGHWAY DEPT
STATE HIGHWAY COMMISSION BLDG, PO BOX 270
JEFFERSON CITY MO 65101

DIRECTOR, MISSOURI STATE PARK BOARD
STATE OFFICE BUILDING, 1204 JEFFERSON
JEFFERSON CITY MO 65101

FREDERICK A BRUNNER PH.D P.E., STATE HISTORIC PRESERVATION OFCR
DEPT OF NATURAL RESOURCES, PO BOX 176
JEFFERSON CITY MO 65102

HONORABLE JAMES MURPHY, MISSOURI SENATOR
3742 UPTON STREET, ST. LOUIS, MO 63116

*SINGLE COPIES DISTRIBUTED EXCEPT AS INDICATED

DISTRIBUTION -- EXTERNAL

NO
COPIES*

DISTRICT ENGINEER, DISTRICT 3
MISSOURI STATE HIGHWAY COMMISSION, HANNIBAL, MO 63401

BOARD OF JUDGES, LEWIS COUNTY COURT HOUSE
MONTICELLO, MO 63457

CHAIRMAN, COUNTY BOARD OF SUPERVISORS
COURT HOUSE, LEWIS COUNTY
MONTICELLO, MO 63457

COUNTY ATTORNEY, COURT HOUSE
LEWIS COUNTY, MONTICELLO, MO 63457

COUNTY CLERK, LEWIS CNTY COURT HOUSE
MONTICELLO, MO 63457

COUNTY ENGINEER, COURT HOUSE
LEWIS COUNTY, MONTICELLO, MO 63457

LEWIS COUNTY HIGHWAY DEPT., MONTICELLO, MO 63457

AMERICAN WATERWAYS OPERATORS INC, ATTN MR HERMAN J MOLZAHN
1600 WILSON BLVD - SUITE 1000, ARLINGTON VA 22209

SOIL & WATER DISTRICTS COMM., P.O. BOX 1368
2010 MISSOURI BLVD, JEFFERSON CITY, MO 65102

CANTON PUBLIC LIBRARY, CANTON MO 63435

PAUL HANSEN, IZAAK WALTON LEAGUE
UPPER MISSISSIPPI REGNL OFC, 6601 AUTO CLUB ROAD
MINNEAPOLIS MN 55438

JANE ELDER, THE SIERRA CLUB
214 N HENRY ST SUITE 203, MADISON WI 53703

CANTON PRESS-NEWS JOURNAL, CANTON, MO 63435

THE LEWIS COUNTY JOURNAL, CANTON, MO. 63435

*SINGLE COPIES DISTRIBUTED EXCEPT AS INDICATED

DISTRIBUTION -- EXTERNAL

NO
COPIES*

STATION KHQA-TV, QUINCY IL 62301

RADIO STATION KQCA-FM, CANTON, MO 63435

MARION LAMBERT, C/O ELIOT STATE BANK
JACKSONVILLE IL 62650

RICHARD & PHYLLIS MCDONALD, #7 SUMMER CREEK
QUINCY IL 62301

PAUL N WHEELER, FERTILE ACRES
ROUTE 1-BOX 19, ALTONA IL 61414

RALPH BARKLEY, RR #1
CANTON MO 63435

JAMES & IRENE CALDWELL, RR #2
CANTON MO 63435

*SINGLE COPIES DISTRIBUTED EXCEPT AS INDICATED

DISTRIBUTION -- INTERNAL

COMMANDER, US ARMY ENGINEER DISTRICT, ROCK ISLAND,
CLOCK TOWER BLDG., ROCK ISLAND, IL 61204-2004

ATTN: CENCR-DE	CENCR-PD-E
CENCR-RE	CENCR-PD-P
CENCR-ED	CENCR-CD
CENCR-ED-D	CENCR-OD
CENCR-ED-H	CENCR-IM-C (3)
CENCR-PA	
CENCR-PD (2)	